

Amendments to the Claims

This listing of the claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims

1. **(Currently Amended)** An isolated nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:1, or [[a]]the complement thereof, wherein said nucleic acid molecule encodes a polypeptide having 6-phosphogluconolactonase activity.

2-3. **(Canceled)**

4. **(Currently Amended)** An isolated nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2 and wherein the polypeptide has 6-phosphogluconolactonase activity.

5. **(Currently Amended)** An isolated nucleic acid molecule which hybridizes to the complement of [[a]]the nucleic acid molecule consisting of SEQ ID NO:1, in 6X SSC at 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 50-65°C, and wherein said nucleic acid molecule encodes a polypeptide having 6-phosphogluconolactonase activity.

6. **(Currently Amended)** An isolated nucleic acid molecule comprising (a) a nucleotide sequence which has at least 90% identity with the nucleotide sequence of SEQ ID NO:1, wherein said nucleic acid molecule encodes a polypeptide having 6-phosphogluconolactonase activity, or (b) the complement of (a) thereof.

7-8. **(Canceled)**

9. **(Previously Presented)** An isolated nucleic acid molecule comprising the nucleic acid molecule of any one of claims 1 and 4-6 and a nucleotide sequence encoding a heterologous polypeptide.

10. **(Original)** A vector comprising the nucleic acid molecule of claim 1.

11. **(Original)** The vector of claim 10, which is an expression vector.

12. **(Previously Presented)** A host cell transformed with the expression vector of claim 11.

13. **(Original)** The host cell of claim 12, wherein said cell is a microorganism.

14. **(Original)** The host cell of claim 13, wherein said cell belongs to the genus *Corynebacterium* or *Brevibacterium*.

15-16. **(Canceled)**

17. **(Previously Presented)** A method of producing a polypeptide encoded by an expression vector comprising the nucleic acid molecule of any one of claims 1 and 4-6, comprising culturing a host cell transformed with said vector in an appropriate culture medium to, thereby, produce the polypeptide.

18-24. **(Canceled)**

25. **(Currently Amended)** A method for producing a fine chemical, comprising culturing a cell ~~containing a~~ transformed with the vector of claim 11 such that the fine chemical is produced.

26. **(Original)** The method of claim 25, wherein said method further comprises the step of recovering the fine chemical from said culture.

27. **(Canceled)**

28. **(Original)** The method of claim 25, wherein said cell belongs to the genus *Corynebacterium* or *Brevibacterium*.

29. **(Previously Presented)** The method of claim 25, wherein said cell is selected from the group consisting of: *Corynebacterium glutamicum*, *Corynebacterium herculis*, *Corynebacterium lilium*, *Corynebacterium acetoacidophilum*, *Corynebacterium acetoglutamicum*, *Corynebacterium acetophilum*, *Corynebacterium ammoniagenes*, *Corynebacterium fujiokense*, *Corynebacterium nitrilophilus*, *Brevibacterium ammoniagenes*, *Brevibacterium*

flavum, *Brevibacterium ketosoreductum*, *Brevibacterium linens*, *Brevibacterium parafinoliticum*, and those strains set forth in Table 3.

30. (Canceled)

31. (Original) The method of claim 25, wherein said fine chemical is selected from the group consisting of: organic acids, proteinogenic and nonproteinogenic amino acids, purine and pyrimidine bases, nucleosides, nucleotides, lipids, saturated and unsaturated fatty acids, diols, carbohydrates, aromatic compounds, vitamins, cofactors, polyketides, and enzymes.

32. (Original) The method of claim 25, wherein said fine chemical is an amino acid.

33. (Currently Amended) The method of claim 32, wherein said amino acid is selected from the group consisting of: lysine, glutamate, glutamine, alanine, aspartate, glycine, serine, threonine, methionine, cysteine, valine, leucine, isoleucine, arginine, proline, histidine, tyrosine, phenylalanine, and tryptophan.

34-38. (Canceled)

39. (Previously Presented) The isolated nucleic acid molecule of claim 6, wherein the nucleotide sequence has at least 95% identity to the nucleotide sequence of SEQ ID NO:1.